Polymeric Surfactants Derived From Cyclic Monomers Having Pendant Fluorinated Carbon Groups By Medsker et al. Sheet 1 of 2 Sheets

File No. 0-005360USXFPD Serial No. 10/657,056

Commercial scale manufacture of Poly-3-FOX polymer and diammonium disulfate

Poly-3-Fox Polymer Synthesis

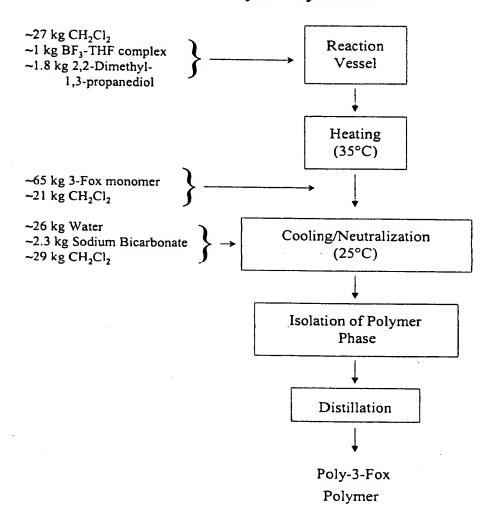


FIG. 1

Poly-3-Fox Diammonium Disulfate Synthesis ~45 kg Poly-3-Fox polymer Reaction Vessel ~45 kg Tetrahydrofuran ~11 kg Fuming sulfuric acid Acid Addition ~10 kg Ammonium hydroxide Neutralization Cooling Filtration

FIG. 2

Solvent Strip

(Poly-3-Fox diammonium disulfate)